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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,482	12/04/2003	George Olaru	2107.0340001	7525

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EXAMINER	
HOGAN, JAMES SEAN	
ART UNIT	**PAPER NUMBER**
3752	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

NT

Office Action Summary	Application No.	Applicant(s)	
	10/726,482	OLARU, GEORGE	
	Examiner	Art Unit	
	James S. Hogan	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16,19 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16,19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1, 3, 4, 6-9, 12, 13, 15, 16, 19 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,761,557 to Gellert et al. in view of U.S. Patent No. 6,043,446 to Jenko et al and further in view of U.S Patent No. 5,411,392 to Von Buren.

Regarding the independent claims 1, 4, 15, and 16, Gellert ('557) teaches a nozzle body having a melt channel with a first heater (102/106) securely attached to the nozzle body. However, Gellert et al. ('557) does not teach a second heater being slideably attached and partially overlapping the first heater. Both Jenko et al ('446) and Von Buren ('392) teach a slide-on heater clamp (100) designed for clamping to an object for heating purposes, especially a nozzle or a hot runner channel (see Abstract). Depending on how far up the body of a nozzle the clamp heater would be placed would determine whether or not the first heater of a hot runner channel and the clamping Jenko et al second heater would overlap. Also, the heater (106) of Gellert ('557) is embedded (see fig. 11, showing the heater *embedded* in a groove) in the nozzle body. However, neither Gellert et al or Jenko et al provides clear motivation for using a secondary heater, as either a solution for repairing or for providing additional heat for an

already-heated nozzle. Von Buren teaches the use of a slide-on, clampable nozzle heater as both a repair solution ((Col. 3, line 24-27) and as a solution for providing heat in an overlapped area of an already-heated nozzle (Col. 3, line 16-21). Further, Von Buren clearly teaches a clampable heater can "effectively be employed on any channel means from a source of molten plastic to the injection gate" (Col. 5, line 26-32), providing motivation for the use of a clamp-on heater at any location of any hot-runner nozzle, also supported by Figure 4. As per claim 3, the nozzle body of Gellert ('557) is grooved for the placement of the heaters. As per claim 4, Gellert ('557) also teaches (again, Figure 11) the heater (106) of Gellert (557) is located *around* and *in contact* with an external surface (104) of the nozzle body. As per claim 5, the slide on heater of Von Buren is a film heater. As per claims 6-9 and 19-20, the heated nozzle of Gellert ('557) teaches the first portion of the melt channel heated by the heater (106) and is substantially the same as a second portion heated by a second heater (102), and that the two heaters can be operated independently from each other or simultaneously (See claims 4-5 of Gellert ('557)) in any combination). As for claims 10 and 11, neither Gellert at al, Jenko et al, or Von Buren teach the first or second heaters including two independent heaters, however, it would have been obvious to one having ordinary skill in the art to at the time the invention was made to have made heater elements for nozzles with multiple independent heaters since it has been held that mere duplication of the essential working parts of a device, in this case, multiple resistive heaters, involves only routine skill in the art. (See *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8). As for claim 12, the heater of Jenko et al. ('446), is capable (in use with Gellert) to

be a "second" heater, and is located on a sleeve (108) that is clampable to a nozzle body. As for claim 13, a thermocouple (128) (see fig 7a) on the Jenko et al. ('455) device monitors the temperature of a heater, and thus possibly all heaters of a hot melt runner nozzle. As per claim 14, The Jenko et al device teaches a first thermocouple for monitoring a heater, a second thermocouple can be considered taught by Geller et al with the existence of sensors (94 and 96) located on the nozzle body (See Col. 9, line 38-46). Hence, it would have been obvious to one skilled in the art at the time the invention was made to have modified the heated hot runner melt nozzle of Gellert ('557) with the advanced heater clamp of Jenko et al ('455) and used in a manner as taught by Von Buren in order to provide a nozzle that can be operated in at a potentially higher temperature than originally designed, or as a temporary repair to a hot melt runner nozzle that has experienced a heater failure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSH
12/16/2006

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